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(54) **Low noise MRI scanner**

(57) A low noise imaging apparatus for producing Magnetic Resonance (MR) images of a subject and for substantially minimizing acoustic noise generated during imaging is provided. The imaging apparatus comprises a magnet assembly (4,6,7), a gradient coil assembly (3), and a rf coil assembly (2), wherein at least one of the magnet assembly, the gradient coil assembly and the rf coil assembly are configured to reduce the generation and transmission of acoustic noise.

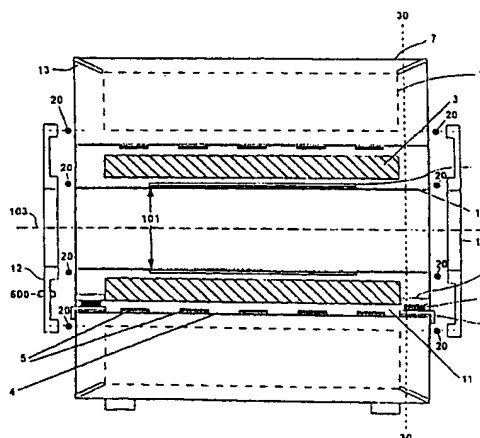


Fig. 1



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## EUROPEAN SEARCH REPORT

Application Number  
EP 01 30 8414

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<del>The present search report has been drawn up for all claims</del>			
Place of search		Date of completion of the search	Examiner
Munich		18 November 2003	Skalla, J
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document  T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons  & : member of the same patent family, corresponding document			

EPO FORM 1503 03.02 (P04C01)



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## EUROPEAN SEARCH REPORT

Application Number  
EP 01 30 8414

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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<p><del>The present search report has been drawn up for all claims</del></p>			
Place of search Munich		Date of completion of the search 18 November 2003	Examiner Skalla, J
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

**LACK OF UNITY OF INVENTION**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-7,10



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**LACK OF UNITY OF INVENTION  
SHEET B**

Application Number  
**EP 01 30 8414**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

**1. claims: 1-7,10**

Configuration of at least one of magnet assembly, gradient coil assembly and rf coil assembly to reduce generation and transmission of acoustic noise.

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**2. claims: 8,9**

Provision of a plurality of suspension members for attaching the magnet to an outer surface.

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 30 8414

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

18-11-2003

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82